



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				<i>Complete if Known</i>	
				Application Number	10/684,137
				Filing Date	October 10, 2003
				First Named Inventor	Matyjaszewski
				Art Unit	Not Yet Assigned
				Examiner Name	
(use as many sheets as necessary)					
Sheet	1	of	5	Attorney Docket Number	00798DIVCIP

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
RL		3,183,217	05/11/1965	Semiuik, et al.	
		3,959,225	05/25/1976	Kuntz	
		4,007,165	02/08/1977	MacLeay, et al.	
		4,374,751	02/22/1983	Dudgeon	
		4,728,706	03/01/1988	Farnham, et al.	
		4,940,648	07/10/1990	Geiger	
		4,954,416	09/04/1990	Wright, et al.	
		5,089,135	02/18/1992	Yoneyama, et al.	
		5,169,914	12/08/1992	Kaszas, et al.	
		5,312,871	05/17/1994	Mardare, et al.	
		5,405,913	04/11/1995	Harwood, et al.	
		5,451,647	09/19/1995	Faust, et al.	
		5,470,928	11/28/1995	Harwood, et al.	
		5,510,307	04/23/1996	Narayanan, et al.	
		5,763,548	06/09/1998	Matyjaszewski, et al.	
RL		5,789,487	08/04/1998	Matyjaszewski, et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
RL		EP 0341012	11/08/1989		
RL		EP 0870809	10/14/1998		
RL		WO 00/56795	09/28/2000		
RL		WO 98/01480	01/15/1998		
Examiner Signature	<i>Robert Raby</i>			Date Considered	1/9/06

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, PI-1130365 v1 0201710-0424



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

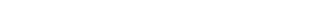
Information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				<b>Application Number</b>	Not Yet Assigned
				<b>Filing Date</b>	Concurrently Herewith
				<b>First Named Inventor</b>	Matyjaszewski
				<b>Art Unit</b>	Not Yet Assigned
				<b>Examiner Name</b>	
<i>(use as many sheets as necessary)</i>					
Sheet	2	of	5	Attorney Docket Number	00093CON

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
DN		5,807,937	09/15/1998	Matyjaszewski, et al.	
		5,910,549	06/08/1999	Matyjaszewski, et al.	
		5,945,491	08/31/1999	Matyjaszewski, et al.	
		6,111,022	08/29/2000	Matyjaszewski, et al.	
		6,121,371	09/19/2000	Matyjaszewski, et al.	
		6,124,411	09/26/2000	Matyjaszewski, et al.	
		6,162,882	12/19/2000	Matyjaszewski, et al.	
		6,288,186	09/11/2001	Matyjaszewski, et al.	
		6,407,187	06/18/2002	Matyjaszewski, et al.	
		6,512,060	01/28/2003	Matyjaszewski, et al.	
		6,538,091	03/25/2003	Matyjaszewski, et al.	
		6,541,580	04/01/2003	Matyjaszewski, et al.	
		6,624,262	09/23/2003	Matyjaszewski, et al.	
		6,624,263	09/23/2003	Matyjaszewski, et al.	
BN		6,627,314	09/30/2003	Matyjaszewski, et al.	

## **FOREIGN PATENT DOCUMENTS**

Examiner Signature		Date Considered	1/9/05
-----------------------	---	--------------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				<i>Complete If Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Matyjaszewski
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
(use as many sheets as necessary)					
Sheet	3	of	5	Attorney Docket Number	00093CON

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
<i>RPR</i>		United States Patent application No 10/269,556 filed October 11, 2002. Attorney Docket No. 010686			
		United States Patent application No. 09/359,359 filed July 23, 1999. Attorney Docket No. 00169DIV3			
		United States Patent application No. 09/534,827 filed March 23, 2000 Attorney Docket No. 00093			
		United States Patent application No. 09/972,056 filed October 5, 2001. Attorney Docket No. 00819			
		United States Patent application No. 10/034,908 filed December 21, 2001. Attorney Docket No. 001153			
		United States Patent application No. 10/118,519 filed April 6, 2002. Attorney Docket No. 010314			
		United States Patent application No. 10/271,025 filed October 15, 2002. Attorney Docket No. 010687			
		United States Patent application No. 10/289,545 filed November 7, 2002. Attorney Docket No. 00163DIVCON			
		CARTER ET AL., "Polyimide Nanofoams From Phase-Separated Block Copolymers", Electrochemical Society Proceedings, 1997, pp. 32-43, Vol. 97, No. 8, Electrochemical Society, Pennington, NJ, US, ,			
		CHEN ET AL., "Pyrolytic Behavior and In-Situ Paramagnetism of Star-like C <sub>60</sub> (CH <sub>3</sub> ) <sub>x</sub> (PAN)x copolymers", European Polymer Journal, March 1, 1998, pp. 421-429, Vol. 34, No. 3-4, Elsevier Science Ltd., Oxford, GB,			
<i>RPR</i>		DOROTA GRESZTA ET AL., "Gradient Copolymers of Styrene and Acrylonitrile Via Atom Transfer Radical Polymerization", Polymer Preprints, April 1997, pages 709-710, Vol 38(1).			

Examiner Signature	<i>Robert Raby</i>	Date Considered	1/9/06
--------------------	--------------------	-----------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				Complete If Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Matyjaszewski
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
(use as many sheets as necessary)					
Sheet	4	of	5	Attorney Docket Number	00093CON

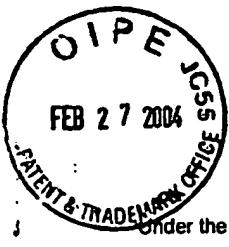
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
		GROMADA, J.; MATYJASZEWSKI, K. Macromolecules 2001, 34, 7664-7671.			
		JIN-SHAN WANG AND KRZYSZTOF MATYJASZEWSKI, "Controlled/"Living" Radical Polymerization. Atom Transfer Radical Polymerization in the Presence of Transition-Metal Complexes". Reprinted from the Journal of the American Chemical Society, 1995, Vol. 117, No. 20, pp 5614 - 5615			
		JIN-SHAN WANG AND KRZYSZTOF MATYJASZEWSKI, "Controlled/"Living" Radical Polymerization. Halogen Atom Transfer Radical Polymerization Promoted by a Cu(I)/Cu(II) Redox Process". Reprinted from Macromolecules, 1995, 28. Department of Chemistry, Carnegie Mellon University. Received May 2, 1995; Revised Manuscript Received August 14, 1995, pp 7901 - 7910			
		KRZYSZTOF MATYJASZEWSKI, MINGLI WEI, JIANHUI XIA AND NANCY E. McDERMOTT, "Controlled/"Living" Radical Polymerization of Styrene and Methyl Methacrylate Catalyzed by Iron Complexes", Macromolecules, Vol. 30, No. 26, 1997, pp 8161 - 8164			
		KRZYSZTOF MATYJASZEWSKI, SIMION COCA, SCOTT G. GAYNOR, MINGLI WEI AND BRIAN E. WOODWORTH, "Zerovalent Metals in Controlled/"Living" Radical Polymerization", Macromolecules, 1997, pp. 7348-7350, Vol. 30, No. 23.			
		MATYJASZEWSKI, K.; Editor Controlled/Living Radical Polymerization. Progress in ATRP, NMP, and RAFT. In: ACS Symp. Ser., 2000; 768, 2000., Chapter 19 "Reverse Atom Transfer Radical Polymerization Using AIBN or BPO as Initiator" pp. 263-275			
		MATYJASZEWSKI, K.; XIA, J. Chem. Rev. 2001, 101, 2921-2990.			
		MINGLI WEI, JIANHUI XIA, NANCY E. McDERMOTT AND KRZYSZTOF MATYJASZEWSKI, "Atom Transfer Radical Polymerization of Styrene in the Presence of Iron Complexes", Polymer Preprints, 38(2), 231 (1997), Department of Chemistry, Carnegie Mellon University.			
		QIU, J.; MATYJASZEWSKI, K; THOUIN, L.; AMATORE, C. MACROMOL. Chem. Phys. 2000, 201, 1625-1631.			
		QUEFFELEC, J.; GAYNOR, S.G.; MATYJASZEWSKI, K. Macromolecules 2000, 33, 8629-8639.			

Examiner Signature	<i>Robert Raby</i>	Date Considered	1/9/06
--------------------	--------------------	-----------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
Sheet 5		of 5	Attorney Docket Number	00093CON	

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
<i>RM</i>		SIMION COCA, CHRISTINA B. JASIECZEK, KATHRYN L. BEERS AND KRZYSZTOF MATYJASZEWSKI, "Polymerization of Acrylates by Atom Transfer Radical Polymerization. Homopolymerization of 2-Hydroxyethyl Acrylate", Journal of Polymer Science, 1998, pp.1417-1424, Vol. 36, Part A: Polymer Chemistry.			
		SEONG MU JO ET AL, "Polyacrylonitrile with Low Polydispersities by Atom Transfer Radical Polymerization", Polymer Preprints, Vol. 38(1) April 1997, pages 697-698			
		SEONG MU JO ET AL, "Effects of Various Copper Salts and Additives on Polymerization of Acrylonitrile by Atom Transfer Radical Polymerization", Polymer Preprints, Vol. 38(1) April 1997, pages 699-700			
		TAKEICHI ET AL., "Preparation of Porous Carbon Films by the Pyrolysis of Poly(Urethane-imide) Films and Their Pore Characteristics", Carbon, February 2001, pp. 257-265, Vol. 39, No. 2,			
		TIMOTHY E. PATTEN AND KRZYSZTOF MATYJASZEWSKI, Atom Transfer Radical Polymerization and the Synthesis of Polymeric Materials, Advanced Materials 1998 10 No. 12, 901-915.			
		T.E. PATTEN ET AL., "Polymers with very Low Polydispersities from Atom Transfer Radical Polymerization", Science, Vol. 272, pp. 866-868, May 10, 1996.			
		U. SCHUBERT ET AL., "Design of Effective Systems for Controlled Radical Polymerization of Styrene: Application of 4,4'-Dimethyl and 5,5'-Dimethyl 2,2'-Bipyridine Copper(ii) Complexes", Macromol. Rapid Commun., Vol. 20, No. 6, pp. 351-355, 1999.			
		WANG ET AL., "Living"/Controlled Radical Polymerization, Transition-Metal-Catalyzed Atom Transfer Radical Polymerization in the Presence of a Conventional Radical Initiator", Macromolecules, 1995, Vol. 28, pp. 7572-7573.			
		WANG, J.-S.; MATYJASZEWSKI, K., J. Am. Chem. Soc. 1995, 117, 5614-5615.			
<i>RM</i>		XIA J. AND MATYJASZEWSKI K., "Controlled/ "Living" Radical Polymerization. Homogenous Reverse Atom Transfer Radical Polymerization Using AIBN as the Initiator," Macromolecules, 1997, pp. 7692-7696, vol. 30.			

Examiner Signature	<i>Robert Raley</i>	Date Considered	1/9/06
--------------------	---------------------	-----------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

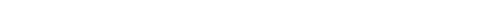
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		<i>Complete If Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/684,137
		Filing Date	October 10, 2003
		First Named Inventor	Krzysztof Matyjaszewski
		Art Unit	1754
		Examiner Name	
<i>(use as many sheets as necessary)</i>			
Sheet	1	of	1
		Attorney Docket Number	00798DIVCIP

## **U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
<i>RHC</i>		WO 97 18247	05/22/1996		

Examiner Signature		Date Considered	1/9/06
-----------------------	---	--------------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.0.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3.) <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.